

Summary
Steller Sea Lion Recovery Team Meeting
Alaska Fisheries Science Center, Seattle, Washington
January 15-16, 2002

Bob Small, chair of the Steller Sea Lion Recovery Team, opened the meeting at 08:45 on January 15. Doug DeMaster welcomed team members to the Alaska Fisheries Science Center, outlined their task, and emphasized its high priority to the National Marine Fisheries Service. Team members introduced themselves, followed by approving the agenda.

Overview of Recovery Planning

Judy Jacobs, U.S. Fish and Wildlife Service

Recovery was defined as the process by which the decline of an endangered or threatened species is arrested or reversed, and the threats to its survival are neutralized, so that its long-term survival in nature can be insured. The goal of a recovery program is to restore listed species to a point where they are secure, self-sustaining components of their ecosystem, so that the protections of the ESA are no longer required. A recovery plan structures and organizes the recovery effort by delineating, justifying, prioritizing, and scheduling research and management actions, and by specifying the monitoring of biological and recovery tasks needed to track progress. The three principal sections of a recovery plan are the Background, the Recovery, and the Implementation.

The Background section acquaints readers with the species, its status, and threats, providing easily accessible information for decision makers. While the section touches on all relevant research and management information, it should be more a review than a “dissertation”. It should describe the taxonomy, distribution, population trends, life history, reasons for listing, and ongoing conservation efforts. The Background section concludes by providing a recovery strategy that synthesizes the preceding information (particularly the threats, research needs, and ongoing conservation efforts) into a structured, logical approach. The recovery strategy justifies this approach to recovery.

The Recovery section contains the details of the recovery plan. It states the objectives, which are simple, concise statements to downlist or delist a species based on specific criteria. Interim objectives are developed if the information needed to justify the objective is not available. Interim objectives are generally intermediate goals needed to prevent the extinction of a species, and can be intermediate goals that measure recovery progress. They should also address how the information necessary for identifying the ultimate objective (downlisting/delisting) can be obtained. The criteria are specific measures used to determine when a species has met the objective and can be downlisted/delisted, which relate back to the five factors considered in the listing package (habitat loss, over-utilization, disease or predation, inadequate regulations, or other factors). Criteria should be objective and measurable, but are not necessarily just numerical goals. Among the factors that can be considered in criteria are (a) self sustaining populations over key habitats, (b) stable or increasing populations over time, (c) the probability of population persistence over time, (d) achievement of specified population reproductive and recruitment rates, (e) decreases in threats, or (f) the amount and quality of habitat protected for

the species. The criteria may be stated relative to a number of specified Recovery Units (i.e., units that are necessary to both the continued survival and recovery of a species) that exist throughout the species' range. A Recovery Unit (RU) can be used as the basis for a jeopardy determination in an ESA Section 7 consultation, but cannot be separately downlisted or delisted unless it meets the policy criteria for a Distinct Population Segment (DPS). RUs are commonly used for wide ranging species to ensure that populations are maintained in several parts of the range. The Recovery section concludes with a narrative outline of the recovery tasks (e.g., habitat conservation and restoration, research, surveys and monitoring, supplementation/disease control, regulatory compliance, etc.). A step-down outline of the narrative is provided to assist explanation.

Monitoring tasks are generally of two types: population monitoring and recovery implementation monitoring. Population monitoring includes that which is necessary to determine whether the population meets recovery criteria, and post-listing monitoring. Post-listing monitoring plans are not a required element of the RP, but the lead agency (in this case NMFS) is required to conduct such monitoring for five years post listing. By monitoring recovery implementation, the agency is able to assess progress toward recovery after the RP has been written and approved.

Only the "innermost" or most detailed of the tasks shown in the step-down outline appear in the schedule presented in the Implementation section. These tasks should be site-specific, and should each represent an item that is discretely fundable. Tasks are placed into one of the following categories: (1) actions that must be taken to prevent extinction or irreversible decline; (2) actions that must be taken to prevent significant decline or adverse impact short of extinction; or (3) all other actions needed for full recovery. The resulting implementation schedule is used to secure funds, establish management priorities, and provide the basis for tracking implementation. It presents tasks in priority (not numerical) order and identifies lead agencies for each task. Agencies so identified are not obligated to participate.

Both NMFS and the USFWS are required by policy to actively solicit independent peer review during the development of draft recovery plans and to summarize the reviewers' opinions in the final plan. Jacobs counseled RT members to remember that they are currently engaged in a plan revision, so they should build on existing information and avoid unnecessary rewriting. The RT should update and expand sections as necessary, and amend criteria as appropriate to reflect new information. The focus should be on site-specific management actions, and adding detail to site-specific tasks and monitoring protocols.

Review of the SCB Study of Recovery Planning

Judy Jacobs, U.S. Fish and Wildlife Service

The Society for Conservation Biology (SCB) began this study in 1998 to review and characterize existing USFWS recovery plans. Recovery plans for 181 species were reviewed during the project. The sample represented about 20% of all recovery plans, and was stratified to include plans for different taxonomic groups (vertebrates, invertebrates and plants), revised and unrevised recovery plans, single-species and multi-species recovery plans, and plans approved over a range of years (1977 to 1998). Through a series of 20 seminars conducted at 19 universities, seminar participants recorded more than 2600 specific data about each recovery

plan using only the information presented in the recovery plan and the original listing document for the species. Data were compiled into a central database through an online interface to the project website, and are publicly available at <http://www.nceas.ucsb.edu/recovery>. Researchers then looked for correlations between the responses to these questions and the status of each of the stocks. Among the recommendations for future recovery plans identified thus far:

- Make threats a unifying theme. Plans should address mitigation, develop tasks for all identified threats, and monitor threats as well as the population itself.
- Describe monitoring needs.
- Make use of modern population biology tools.

Other findings include:

- Key biological information has at times not been well linked with RP tasks. In those cases where the linkage is strong the status of the population has tended to improve.
- Make plans “living documents” that are shorter, more focused, and contain concrete tasks and goals.
- Keep teams small but diverse. Plans with large teams took longer to complete, and their goals were not as clearly defined. Diversity of authorship tended to improve plan quality and implementation. Plans with non-federal authors were more likely to have species with improving status. Task implementation increased in plans with state and local government agency and non-agency representatives on the team (i.e., stakeholder involvement in the process promoted implementation).
- Make administrative designations relevant. Recovery priority should correlate well with implementation and funding of tasks. Critical habitat if designated should have some influence on task priority.
- Time, not the number of plan revisions, was more highly correlated to recovery.

Overview of Previous Recovery Team Actions

Tom Loughlin, National Marine Fisheries Service, NMML

Tom Loughlin presented a chronology of the Steller Sea Lion Recovery Team based on personal records and recollections. The team was formed in March 1990 with 11 members, and first met in April 1990. The first six meetings focused on development of the RP, which was completed and submitted in October 1991. Following annual meetings in 1992 and 1993 and some membership changes (one replacement, one addition), the team informally disbanded and did not meet again for 2.5 years. Annual meetings resumed during 1996-1999, and during this period the team began to establish its own direction. The team engaged in reviews of research, agency fishery management and enforcement actions, and SSL mortality in foreign fisheries. It also initiated peer review of current SSL research through a series of workshops that were completed in December 1997 (Behavior/Rookery Studies and Telemetry) and February 1999 (Physiology and Feeding Ecology). The team was disbanded in April 2001 and reformed in October 2001 with 20 members. The January 2002 meeting is the 13th in the team’s history.

Funding for Steller sea lion recovery activities has generally increased during the last 20 years. NMFS funding during 1982-1989 totaled \$1.15 million and ranged from \$50,000 to \$300,000 per year. During the decade of the 1990’s funding for Steller sea lion recovery activities totaled \$13.317 million and ranged from \$541,000 to \$3.3558 million per year. By the end of the

decade, funding recipients included the Alaska Department of Fish and Game (ADF&G), the Alaska Sea Life Center (ASLC), and the North Pacific Universities Marine Mammal Research Consortium (NPUMMRC) in addition to NMFS. During the three years from 2000 to 2002, funding has totaled \$84.735 million and funding recipients include NMFS, ADF&G, ASLC, NPUMMRC, the University of Alaska, the North Pacific Fishery Management Council, and the Alaska Fisheries Development Foundation.

Since the current RP was developed around a single stock theme and is currently outdated, it has been apparent to some that a revision is needed. Loughlin presented two documents prepared in anticipation of this event. The first was a draft outline for a revised plan dated 10/4/00 that was prepared by Loughlin and former SSL RT chair Lloyd Lowry (Table 2). The second was an annotated outline for a revised RP for the Western SSL population dated 8/11/01 that incorporates suggestions from Craig Johnson of NMFS. Loughlin suggested that several individuals had begun to gather materials for a plan revision, and that those materials and the summaries prepared for the recent Environmental Impact Statement and the Biological Opinion could form the basis for a new plan.

NMFS Recovery Planning Guidelines

Susan Pultz, National Marine Fisheries Service

Pultz distributed the September 1992 NMFS Recovery Planning Guidelines. As a representative of the NMFS Endangered Species Division in Silver Spring, she will deal with all SSL issues in NMFS Headquarters, along with Tom Eagle, and will keep the RT informed of revisions to the guidelines. One such revision is the decision to include executive summaries in all future RPs. Additionally, the RP should include the role of the species in the ecosystem, and the population trend and status of other species within the ecosystem should also be included. Team members were urged to remember the importance of monitoring in the plan revision; the final plan should reflect a balance between site-specific management and research. They should not constrain themselves needlessly, since the process is open and can often be taken where the RT wishes. The membership of the new RT is purposefully diverse and its goal is to recover SSL as a species, not merely to preserve remnant populations. Examples of recovery plans will be made available to the team, although many are already available online through the NMFS website.

SSLRT Terms of Reference

Tom Eagle and Shane Capron, National Marine Fisheries Service

Eagle distributed a January 9, 2002 memorandum to the RT from James Balsiger that proposed a draft Terms of Reference for the RT. Eagle emphasized that this draft is subject to revision and will probably be finalized at the next RT meeting. The ESA does not give much guidance to RTs, so most issues are left to agency policy. Since this RT is relatively large in size it is likely that there are a range of expectations regarding the RT's charge; this document provides a sense of the agency's expectations.

The RT's ultimate goal is to promote the recovery of SSL, with an interim goal of halting the decline and preventing extinction. NMFS' support for the effort includes staff representatives from the management (Payne, Capron), science (Loughlin, Fritz), and policy (Eagle) branches of

the agency, and funding for travel and other meeting/drafting expenses. The participants are volunteers and the RT is exempt from requirements of the Federal Advisory Committee Act (FACA). Team members are expected to act as independent scientists and concerned citizens, not as representatives of particular agencies or interest groups. The RT is expected to provide advice on measures that would promote recovery and on the content of the RP. Because of the size of the team, NMFS expects that smaller subcommittees will frequently be formed to work on portions of the plan. The final RP is a NMFS document, and the agency is free to accept, reject, or modify the RT recommendation.

NMFS expects the RT to recommend site-specific management measures. Both human and natural forces affecting the species should be organized according to the ESA listing factors. The team should describe the scope and magnitude of these factors, the associated uncertainties, and the point at which these factors would cease to be a threat. NMFS would appreciate advice on issues ranging from the subdivision of priorities in the implementation schedule to the frequency and precision of monitoring. Issues such as the format of the plan (one plan or two), the general timeline and intermediate steps in the recovery schedule, subcommittee structure, etc. are left to the discretion of the team.

Capron advised the RT that their primary goal is to revise the RP, and not to review critical habitat. NMFS may solicit additional advice from the RT, but only after the draft RP has been completed and submitted to NMFS. In the Plan, the team is expected to identify the habitat characteristics important to Steller sea lions. This may include specific recommendations for management measures based on the needs of Steller sea lions and the habitat available to them. NMFS does not anticipate initiating a formal review of critical habitat for Steller sea lions until after the RP is completed, and the scientific information suggests that a review is necessary for the conservation of the species.

Team discussion following the presentation focused on the relationship between the RP and the recent Biological Opinion on the pollock, Pacific cod, and Atka mackerel fisheries as managed by the North Pacific Fisheries Management Council and NMFS, as well as on the coordination and control of subcommittees. The Biological Opinion was described as a review of a specific Federal action, while the RP should be broader in scope. The RP may draw information from a variety of sources, including recent section 7 consultations and the ongoing National Academy of Sciences review (if available). Critical habitat reviews triggered by petitions are independent of the RP revision and will be addressed administratively under separate timelines. NMFS estimates two to three years to complete the revised RP based on the length of time required to complete the original RP and the increased size of the new RT. Team members were assured that subcommittees would not act with complete independence, and that subcommittee products would be brought back to the full RT for review and discussion. As RT Coordinator, Capron will work with subcommittees, providing background material, facilitating outside contracts if necessary, distributing copies, etc. Funding levels for the RP revision was not specified but is considered to be adequate as this RP is a high priority for the Agency. Any requests for subcommittee funding should be submitted through the RT Chair. Other issues discussed by the team included:

- Confidentiality: Some information presented to the team may be considered preliminary, proprietary, or confidential. The detailed telemetry data recently provided to the RPA work group was suggested as a recent example. The RT was told it could hold closed sessions if necessary, and could develop rules for such information as the need arises.
- Clarification of terms, including site specificity and recovery: Some members felt that instructions to present site-specific recommendations were at odds with other instructions to make the RP more general than an RPA. Team members were advised to make recommendations at the larger geographic level, e.g. RUs or other appropriate sub-population categories, and not at smaller geographic levels. Regarding delisting criteria, the team has flexibility under the guidelines to recommend appropriate criteria that include rate of population change, distribution, or other factors as appropriate.
- Reference Materials: Team members requested and were provided a copy of the ESA for reference. There are few regulations that actually implement the act. Those NMFS regulations and policies relating to the ESA are compiled on compact disc and will be made available to the team at their next meeting.
- NMFS' response to the revised RP: If NMFS chooses to make major revisions to the draft RP, team members requested that NMFS provide an explanation for those changes to the RT.

NMFS plans to make changes to the draft Terms of Reference based on these discussions and distribute a revised version to the RT before its next meeting.

Overview of Current SSL Research Coordination

Lowell Fritz, National Marine Fisheries Service

Fritz described the current funding available for SSL research and listed the participants. These organizations meet each year in January, July, and September to develop a research framework, identify information gaps and research needs, and determine priorities. Many of the communications between members of the group are via the Internet. A larger symposium of SSL researchers to present research results has been planned to take place in approximately one year.

Current research has been organized using both a “top-down” (i.e., based on the factor(s) under investigation) and a “bottom-up” (i.e., by research theme) approach. Potential factors under investigation include indirect fisheries effects; environmental changes; direct anthropogenic effects related to subsistence, shooting, etc.; predation; disease; contaminants; or synergies/combinations of these factors. Themes under investigation include life history, foraging, vital rates, fish assessment and fisheries, ecosystems, other anthropogenic effects, predation, disease, contaminants, management, and communications. Of the 152 current projects, the most common factors under investigation include foraging (42), fish assessment (28), vital rates (28), ecosystems (17), and predation (13). A complete list and an interactive database of projects are available via the Internet at

<http://161.55.120.152/sslprojects/sslentrance.cfm>. (click on “Current Research”)

Team discussions focused on how the RT should interact with this existing research coordination structure. This coordination effort was described as an attempt to organize ongoing research after the fact, and to categorize it in a way that could identify weaknesses or omissions in current

efforts. Each group has tended to approach its research in different ways. The RT could help by prioritizing this work, or in assessing how these activities relate to recovery priorities that the RT develops.

RT Procedures

The RT engaged in extensive discussions regarding its operating procedures. Issues included:

- Facilitation: Chair Bob Small volunteered to facilitate RT discussions and coordinate plan development, but he reserved the option to bring in an independent facilitator for specific issues or subcommittees if necessary.
- Minutes/Meeting Records: The RT recognized the importance of minutes as a record of the team's opinions. They agreed that the minutes should take the form of meeting summaries rather than transcripts, and that minority views should be represented on important issues. Presenters will be named, but other discussions will be represented in general terms. The PSMFC Rapporteur (Didier) will prepare a draft summary of RT meetings that will be sent to the chair and the NFMS Coordinator (Small and Capron) for review and preliminary editing. The approved draft will be distributed to the full RT prior to its next meeting for review and comment. Team members may respond directly to the rapporteur with editorial comments, but issues involving content should be referred to the chair for discussion at the next RT meeting. Minutes will be reviewed and approved at the next RT meeting before they may be released to the public. It was also suggested that some record be made of subcommittee meetings, but the details of this record were left for each subcommittee to decide.
- Quorum and Voting: While consensus is desirable and could give additional weight to RT recommendations, members recognized that consensus would not always be possible among such a diverse group. Voting will be used when necessary to make decisions in these cases, and meeting minutes will record the extent and level of disagreement on major issues. The chair was asked to be sensitive to whether the RT has thoroughly discussed an issue, and to strive for consensus on when the RT is ready to make a decision. The RT discussed whether votes should be solicited from absent members, and whether teleconferences should be used to increase participation. RT members generally agreed that members must be present to vote and that teleconferences were difficult for large groups. The RT also discussed the merits of various combinations of quorum and voting majority. Higher quorum levels mean a more diverse range of views will be represented, but coordinating member schedules may be more difficult and time-consuming. Higher voting majorities mean more interactions among members are required and should strengthen RT recommendations, but these majorities may take longer to achieve and a simple majority may be adequate for recommendations. By consensus, the RT agreed to require a quorum of at least 75% (15 of 20 members) and a voting majority of 67% (at least 11 members) for all decisions.
- RT Communications and Resources: NMFS suggested that requests from entities outside the RT (including the media) for information regarding RT views, dynamics, schedules, etc. be referred to the RT Chair for response. NMFS representatives agreed to follow the same procedures.

RP Outline

By consensus, the RT agreed that a single RP with sections describing the Eastern and Western SSL DPSs was preferable to two RPs, one for each DPS. It was explained to the RT that recovery planning and delisting are two separate processes; therefore, combining recommendations for the eastern and western DPSs into a single plan would not create administrative problems. The principal argument for preparing separate plans was that quicker action might be possible in some areas if the RT focused on producing a single plan. However, the RT saw advantages in consolidating life history information, and in presenting all information available on SSL in a single place. The logic behind the delisting criteria for eastern and western DPSs is likely to be similar, although separate implementation schedules may be required.

The RT discussed and adopted with some modifications the draft RP outline that had been prepared by Loughlin, Lowry, and others (Table 2). Draft language for some sections (authors identified in italics) may already exist. The RT must still review these sections and bibliographies must be assembled. The RT discussed whether the sections discussing factors that potentially influence each population (V.B and VI.B) should be aligned to the research factors presented by Lowell Fritz. While many RT members favored this approach, they agreed to leave this revision to any subcommittee assigned to this section. Following the style of the earlier RP, the RT agreed that text in each background section should describe the most recent information and research while the final paragraph would identify information gaps. The RT agreed that it was important to assemble and evaluate the background information on SSL before developing a recovery strategy and developing a recovery plan.

The following subcommittees were formed:

- By consensus the RT agreed that NMFS should contact Lloyd Lowry, the former SSL RT chair, to determine if he is interested in a personal services contract to assemble an initial draft of the background information in sections III, IV, V.A-B, and VI.A-B. If Lowry is unavailable, NMFS staff will prepare the initial draft. This draft will be reviewed and rewritten if necessary by a subcommittee consisting of Calkins, Frazer, Fritz, Pitcher, Stump, and Trites. Loughlin may also participate unless he is actively involved in assembling the original draft. Each reference in this background document will be cited specifically in journal format, bibliographies will be assembled, and copies of the references will be made available for review. More than 1000 full text articles are currently available on a website maintained by the Alaska SeaLife Center (<http://research.alaskasealife.org>) and copies of any cited literature that is not currently posted will be added to this site.
- A subcommittee consisting of Eggers, Hanson, Parker, Small, Trites, and Wynne will begin becoming familiar with Recovery Criteria (including those used by other organizations like CITES [Convention on International Trade in Endangered Species] and the ICUN [The World Conservation Union]). Wynne will examine how recovery has been identified in other RPs. Atkinson and Jack will work with Pultz and potentially Jacobs to collect background information on how RUs have been defined and used in other RPs; Williams will assist this effort if needed.

- Miscellaneous NMFS Staff Assignments: Capron will review the most recent (1997) listing rule to identify the listing criteria that must be referenced in the RP revision. Payne will determine whether recovery definitions have ever been the subject of legal challenge. Eagle will determine the availability of proceedings from a recent workshop on large whale recovery criteria.

Future Meetings

Tentative dates of March 21 (afternoon), 22, and 23 (morning if necessary) were suggested for the next meeting of the RT. These dates immediately follow a planned meeting of the Research Coordination group. Alternative arrangements will be made via email if the contracted background documents cannot be prepared for review by those dates. Several RT members requested presentations on genetics and population structure for the next meeting:

This meeting of the Steller sea lion RT concluded at approximately 16:30 on January 16, 2002.

Table 1. Attendance at the meeting of the Steller Sea Lion Recovery Team held January 15-16, 2002 at the NMFS Alaska Fisheries Science Center, Seattle, Washington.

	Tammy Adams	National Marine Fisheries Service
*	Shannon Atkinson	Alaska Sea Life Center
~	Linda Behnken	Alaska Longline Fishermen's Association
	Vladimir Burkanov	Russian Republic
*	Vernon Byrd	U.S. Fish & Wildlife Service
*	Don Calkins	Alaska Department of Fish and Game (retired)
*	Shane Capron	National Marine Fisheries Service
	Leslie Corneck	University of Alaska
†	Al Didier	Pacific States Marine Fisheries Commission
	Tom Eagle	National Marine Fisheries Service
*	Doug Eggers	Alaska Department of Fish and Game
	Brian Fadely	National Marine Fisheries Service
*	Dave Fraser	Fisherman and NPFMC Advisory Panel
*	Lowell Fritz	National Marine Fisheries Service
*	Tom Gelatt	Alaska Department of Fish and Game
	Brandy Gerke	National Marine Fisheries Service
*	Dave Hanson	Pacific States Marine Fisheries Commission
*	Lianna Jack	Alaska Sea Otter and Steller Sea Lion Commission
	Judy Jacobs	U.S. Fish & Wildlife Service
	Laura Letskey	University of Washington
*	Tom Loughlin	National Marine Fisheries Service
*	Donna Parker	F/V Arctic Storm
	Mike Payne	National Marine Fisheries Service
	Sharon Perkins	Pacific States Marine Fisheries Commission
*	Ken Pitcher	Alaska Department of Fish and Game
	Susan Pultz	National Marine Fisheries Service
	Jeremy Russon	University of Washington
*	Robin Samuelson	Member, NPFMC
	John Sease	National Marine Fisheries Service
**	Bob Small	Alaska Department of Fish and Game
~	Alan Springer	University of Alaska Fairbanks
*	Ken Stump	
*	Andrew Trites	University of British Columbia & North Pacific Universities Marine Mammal Research Consortium
*	Terrie Williams	University of California – Santa Cruz
*	Kate Wynne	University of Alaska – Kodiak
	Anne York	National Marine Fisheries Service
*	Steller Sea Lion Recovery Team Member	
~	Steller Sea Lion Recovery Team Member, absent	
**	Chair, Steller Sea Lion Recovery Team	
†	Rapporteur	

Table 2. Draft outline presented to and discussed by the Steller sea lion RT at its meeting on January 15-16, 2002. Additions (underline) and deletions (strikeout) by the RT.

**DRAFT OUTLINE OF REVISION OF STELLER SEA LION RECOVERY PLAN
REVISED VERSION – 10/4/00**

- I. PREFACE
- II. LIST OF ABBREVIATIONS
- III. Biology and Life History – *drafted by LL, reviewed by TRL, Pitcher Calkins, Trites, Burkanov*
 - A. Distribution and Movements
 - B. Vital Rates
 - 1. Reproduction
 - 2. Survival
 - C. Feeding Ecology
 - 1. Foods consumed
 - 2. Diving behavior
 - 3. Energetic requirements
 - D. Genetics and Stock Identity
 - E. Habitat
- IV. REVIEW OF RECENT AND CURRENT SSL MANAGEMENT MEASURES – *drafted by TRL*
- V. RECOVERY PLAN FOR THE WESTERN STOCK
 - A. Population Status and Trend
 - 1. Gulf of Alaska – *drafted by Sease/TRL*
 - 2. Aleutian Islands – *drafted by Sease/TRL*
 - 3. Bering Sea – *drafted by Sease/TRL*
 - 4. Soviet Union – *drafted by Burkanov/TRL*
 - B. Factors Potentially Influencing the Population
 - 1. Predation – *drafted by LL*
 - 2. Parasitism and Disease – *drafted by LL*
 - 3. Environmental Change – *drafted by Springer/TRL*
 - 4. Harvests and Other Direct Killing – *drafted by LL*
 - 5. Competition for Food – *drafted by TRL*
 - 6. Toxic Substances – *drafted by TRL*
 - 7. Entanglement in Debris – *drafted by LL*
 - 8. Disturbance – *drafted by Calkins/TRL*
 - C. ~~Summary and Conclusions~~ Recovery Strategy – *drafted by LL and TRL*
 - D. Recovery Plan
 - 1. Goal and Objectives – *drafted by LL and TRL, reviewed by Recovery Team*
 - 2. Criteria for Evaluating Population Status – *Recovery Team*
 - 3. Stepdown Outline – *Recovery Team*
 - 4. Narrative – *Recovery Team*
 - 5. Implementation Schedule – *Recovery Team*
 - 6. Plan Implementation Monitoring
- VI. RECOVERY PLAN FOR THE EASTERN STOCK

- A. Population Status and Trend
 - 1. California, Oregon, Washington – *drafted by Sease/TRL*
 - 2. British Columbia – *drafted by Sease/TRL*
 - 3. Southeast Alaska – *drafted by Pitcher/TRL*
 - B. Factors Potentially Influencing the Population
 - 1. Predation – *drafted by LL*
 - 2. Parasitism and Disease – *drafted by LL*
 - 3. Environmental Change – *drafted by Springer/TRL*
 - 4. Harvests and Other Direct Killing – *drafted by LL*
 - 5. Competition for Food – *drafted by TRL*
 - 6. Toxic Substances – *drafted by TRL*
 - 7. Entanglement in Debris – *drafted by LL*
 - 8. Disturbance – *drafted by Calkins/TRL*
 - C. ~~Summary and Conclusions~~ Recovery Strategy – *drafted by LL and TRL*
 - D. Recovery Plan
 - 1. Goal and Objectives – *drafted by LL and TRL, reviewed by Recovery Team*
 - 2. Criteria for Evaluating Population Status – *Recovery Team*
 - 3. Stepdown Outline – *Recovery Team*
 - 4. Narrative – *Recovery Team*
 - 5. Implementation Schedule – *Recovery Team*
 - 6. Plan Implementation Monitoring
- VII. LITERATURE CITED AND BIBLIOGRAPHY
- VIII. APPENDICES
- A. Links to websites with information on Steller sea lion biology and management

STELLER SEA LION RECOVERY TEAM

Draft Meeting Agenda

15-16 January 2002

National Marine Mammal Laboratory

Seattle, Washington

Tuesday, 15 January

8:30 am

1. Opening remarks – Doug DeMaster, NMFS
2. Introductions, review and approval of agenda
3. *Housekeeping: Travel, other?*

9:30 am

4. Overview of ESA recovery planning process – Judy Jacobs, USFWS

12:00 Lunch Break

1:30 pm

Continuation of ESA recovery planning process overview

2:30 pm

5. Overview of previous Recovery Team actions - Tom Loughlin, NMFS

3:00 pm

6. NMFS Recovery Planning Guidelines – Susan Pultz, NMFS
7. SSLRT Terms of Reference – Shane Capron & Tom Eagle, NMFS

Wednesday, 16 January

8:30 am

Continuation of SSLRT Terms of Reference

9:30 am

Overview of current SSL research coordination - Lowell Fritz, NMFS

10:00 am

8. Develop recovery plan outline
 - Determine tasks/objectives of subcommittees
 - Determine subcommittee membership
 - Identify needs for expertise outside SSLRT
 - Identify need for recovery program reviews

12:00 Lunch Break

1:30 pm

Continue development of recovery plan outline

4:30 pm

Determine dates of next meeting(s); adjourn